

Abstract of the Disclosure

Electronic Object Detection, the system and method of this invention can recognize objects in images or data acquired from a screening device and mark said objects if they can be hazardous. It is very useful to help the operators of said screening device to do their job more effectively and more efficiently.

It acquires its input from any TWAIN-compatible digital imaging device comprising screening device with a video to USB adaptor. The data from said device is pre-processed to enhance its quality. The enhancement of these digital images comprises dilation, image-depth conversion, and gray scaling. After the enhancement process, information about each object is extracted from the image.

Using this information, each object is recognized using an object recognition engine tolerant to size and rotation. A monitor hierarchically displays the actual data and the information about the class of each object, its location, and its hazard level.